Building Business Process components in the e-age.

Business rules! don’t be an e-diot.

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Abstract

Modeling has gained focus over the past few years, but practitioners are still confronted with the challenge to close the gap between a model of the business, and a real system implementation. Challenges like:

- business models getting distorted when being implemented or when interfacing with the models in legacy systems.
- business processes not being properly identified as such, or being intertwined in the applications,
- or being lost in technical components of a particular technology.

An additional challenge brought on by the age of the Internet is achieving reuse across distribution channels. I.e. one particular business process which used to serve the desktop (one channel) should now serve Intranet, Internet, WAP, desktop, atm (i.e. different distribution channels).

As this challenge is often not addressed, or even not noticed, we tend to see the multiplication of similar processes, rather than the re-use of one with variants.

The Business Process is the essence of an enterprise, therefore capturing it rightly is essential, as is the reduction of the number of processes to implement.

This tutorial provides a comprehensive set of applicable techniques to model and implement business models as components. These techniques will be introduced by walking thru real examples, progressively uncovering issues to be solved by the appropriate technique. Examples are taken from the fields of Banking, Insurance & Commerce.

Audience

experienced developers, architects and modelers, considering building Business Systems, especially over the Internet, or mobile commerce. The tutorial assumes an elementary knowledge of OO concepts and modeling.
Issues the tutorial concentrates on:

- How to design Business Processes for fast Internet application deployment?
- More generally, how to architecture business systems (as opposed to communication or control systems) to effectively re-use Business Processes over time, projects, and distributions channels (desktop, Internet, WAP...).
- Understanding and modeling Business Processes, Business Rules
  - What really is a Business Processes? Business Object Model, Component Model, Business Process, Business Rules: what are the differences?
  - documenting: details versus refinement, abstraction versus generalities, requirement versus specification, semantics versus formal expression.
  - using Design by Contract, FSM, STD,
  - relating it to events models and work-flow.
- Architecture
  - Layering: Isolation from application and information layers, solving dependency issues.
  - Information layer: entities and databases models, GRM (Kilov’s contracts), using patterns, dealing with legacy models and systems.
- Implementing
  - implementing these techniques in imperative and functional languages. examples and code snippets in C, Eiffel, Java, Erlang.
  - separating Business Processes from application and information layers.
- Development Process & Tools
  - continuity of the model, refinement, cross checks and trace-ability.
  - removing dependency between design decisions and business model
  - finding and testing Business Processes and Business Rules.
  - Business Processes modeling and Business Processes re-engineering
  - relating it to development models, methods, notation, use cases, events models, UML, SYNTROPY, CATALYSIS, MERODE, OCL (add your favorite buzzword...).
  - experimenting with models. creating a model test bench, XP, test suites.
automating code and documentation production with XML, Docbook, open sources tools available.
reuse at the project, domain, enterprise level.
Using components bring changes in project roles distribution

Author

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